

## **PLANNING, SELECTING, STORING, PREPARING & SERVING FOOD TO MEET NUTRITIONAL NEEDS**

### **Planning and Selecting Food to Meet Nutritional Needs Grade Levels: 7-12**

**Concept:** Reading Labels

**Comprehensive Standard:** 6.3 Demonstrate planning, selecting, storing, preparing and serving of foods to meet nutritional needs of individuals and families across the life span

**Technical Standard(s):** 6.3.2 Select, store, prepare and serve nutritious and aesthetically pleasing foods that meet the health and wellness needs of family members based on available resources

#### **LESSON COMPETENCIES**

- ? Identify the parts of the food label
- ? Explore why foods labels are beneficial to consumers
- ? Compare food products using the food label
- ? Analyze nutrient content claims made on food labels

#### **Anticipated Behavioral Outcomes:**

- ? Students use food labels to compare calories, nutrient content and cost of foods when making food choices.

#### **Resources Needed:**

- Sample food labels or food packages with a food label
- One or more boxes of breakfast cereal, cereal bowls, measuring cups
- Copies of handouts for each student

#### **References for teachers and students:**

The FDA and the International Food Information Food Council have produced an educational program on the food label as implemented in 1994 for high school students called The New Food Label, There's Something In It For Everybody. The teacher's guide contains 5 lesson plans with learner outcomes, activities, handouts, worksheets and a list of references for more information. This guide is important to complete the activities described in this lesson. The 48-page booklet can be downloaded in PDF format at [www.fda.gov/opacom/catalog/teachkit.html](http://www.fda.gov/opacom/catalog/teachkit.html)

The FDA has numerous publications on food labeling. These publications can be accessed at [www.fda.gov/opacom/campaigns/3foodlbl.html](http://www.fda.gov/opacom/campaigns/3foodlbl.html)

A 7 ½ minute video, *The Food Label and You: Check It Out!*, is available from the FDA for \$8.95. You can preview the video online and view a copy of the Leader's Guide for the video at [www.cfsan.fda.gov/~lrd/labelwww.html](http://www.cfsan.fda.gov/~lrd/labelwww.html)

Students can test their food label knowledge with an interactive quiz at [www.cfsan.fda.gov/~dms/flquiz1.html](http://www.cfsan.fda.gov/~dms/flquiz1.html) It is also available in PDF format at this site if you choose not to use the Internet.

NOTE TO TEACHER: Be sure to read the latest information on food labeling before beginning this unit. The FDA website will provide the most recent updates.

### **Background Information:**

The U.S. Food and Drug Administration (FDA), operating under the Federal Food, Drug and Cosmetic Act, regulates the labeling for all foods other than meat and poultry. The U.S. Department of Agriculture (USDA) under the Federal Meat Inspection Act regulates meat and poultry products.

Food labels for most of the food products sold in the United States must have the product name, the manufacturer's name and address, the amount of product in the package and a list of ingredients in the product. The ingredients are listed in descending order based on weight.

The FDA initiated new guidelines for nutrition labeling in 1994. Nutrition labeling is now required for most foods. In addition, voluntary nutrition information is now available for the 20 most frequently eaten raw fruits, vegetables and fish and the 45 best selling cuts of meat. This information comes under the FDA's voluntary point-of-purchase nutrition information program. For these foods, nutrition information can be provided on the package or posters displayed near the food. These foods are specifically identified in the article Nutritional Info Available for Raw Fruits, Vegetables, Fish available at [www.fda.gov/fdac/special/foodlabel/raw.html](http://www.fda.gov/fdac/special/foodlabel/raw.html)

Also, nutrition information is required for restaurant foods about which a health or nutrient-content claims are made on restaurant menus, signs or placards (*The Food Label*, U.S. Food and Drug Administration, May, 1999)

Foods exempt from nutrition labeling include:

- food served for immediate consumption (i.e. food in cafeterias or airplanes)
- ready-to-eat food that is not for immediate consumption but is prepared primarily on site (i.e. bakery, deli and candy store items)
- food shipped in bulk, as long as it is not for sale in that form to consumers
- medical foods
- plain coffee and tea, some spices and other foods that contain no significant amounts of any nutrient

The food labels provide the following for consumers (FDA, May, 1999):

- ? easy to read formats that make it easy to find nutrition information
- ? information on the amount per serving of saturated fat, cholesterol, dietary fiber, and other nutrients of major health concern
- ? nutrient reference values, expressed as % Daily Values (DV)
- ? uniform definitions for terms that describe a food's nutrient content such as "light", "low-fat", etc.
- ? claims about the relationship between a nutrient or food and a disease or health-related condition, such as calcium and osteoporosis
- ? standardized serving sizes
- ? total percentage of juice in juice drinks

## Learning Activities:

### Middle School Level

- ? Remove the label from 2 similar size cans of food (i.e. green beans and spinach or tomato soup and split pea soup). Tell students that they must choose one of these products for lunch. Which would they choose? After the students have made their choices, reveal the identity of the product. Ask students if they would still choose the same product. Discuss importance of labeling.
- ? Bring in variety of food labels and/or packages with food labels in a grocery bag; give each student a label or product or ask them to pick a label or product from the bag. Ask students to examine the nutrition facts panel on the label and then ask them to name things the nutrition facts panel on the label tells a consumer about the food inside. On the board, list the types of information students find on the panel. (Adapted from The New Food Label: There's Something in It for Everybody)
- ? Using a poster, transparency or handout, assist students in identifying the parts of the nutrition facts panel on food labels.
- ? Introduce serving size by asking one or all students to pour out the amount of breakfast cereal he/she usually eats. Ask students to guess about how much cereal is in each bowl. Ask, "Would you consider these examples to be one serving, more or less?" After guessing, ask students to pour the cereal from the bowl into a measuring cup. Measure out the amount listed as the serving size on the nutrition panel and place this amount in a bowl. Compare the "servings". Note that every person has a different idea of a "serving" and stress that nutrition information on the label is provided for one serving; therefore it is important that consumers know what the serving size amount is. Next, measure the amount in the bowls students poured to see how many servings are represented. Compare to serving sizes on the Food Guide Pyramid. (Adapted from The New Label, There's Something In It For Everybody)

NOTE TO TEACHER: To add interest, use more than one type of cereal to see if students would take larger portions of one cereal over another. For example, provide "Corn Flakes" and "Sugar Frosted Corn Flakes" and compare differences in serving sizes, grams of sugar, calories, etc.

- ? Show the video, *The Food Label and You: Check It Out!* (see reference list for ordering information) Use the questions and activities included in the Leader's Guide that accompanies the video.
- ? Ask students to compare nutrition labels for two similar products in the activity "*Choose the Best, and Leave the Rest*". Provide food labels or food products with the food label for this activity.
- ? Ask students to visit the "Rate Your Plate" interactive web-based game at <http://sp.uconn.edu/~cthompso/> Students select a menu for one meal and a nutrition label for each food choice will be generated. Students could make a

copy of these labels and plan a day's menu to accompany this meal which will meet 100% of the DV for each of the nutrients listed on the label.

- ? Ask student to create a "Top Ten" list poster for reasons why nutrition labels are important to consumers (Adapted from The New Label, There's Something In It For Everybody)

### **High School Level**

- ? Remove the label from 2 similar size cans of food (i.e. green beans and spinach or tomato soup and split pea soup). Tell students that they must choose one of these products for lunch. Which would they choose? After the students have made their choices, reveal the identity of the product. Ask students if they would still choose the same product. Discuss value of labeling. Brainstorm how the food label is important to consumers.
- ? Show the video, *The Food Label and You: Check It Out!* (see reference list for ordering information) Use the questions and activities included in the Leader's Guide that accompanies the video.
- ? Provide students with the handout, *Stake Your Claim*. Go over the terms with students and show examples of food labels stating the claims. Following this, ask students to conduct their own "Supermarket Hunt" as described in The New Label, There's Something In It For Everybody. This activity could be completed as a class field trip or as an assignment to be completed outside of class. Students could be assigned to work in teams of 2.

### **Extended Learning Activities**

- ? **Cafeteria Clues** – Obtain a copy of the cafeteria menus for the following week from the school kitchen and nutrition personnel. Using computer software or other sources, students prepare a nutrition label for each of the menu choices and place on a placard or poster for other students to view in the cafeteria as they make their school lunch choices.
- ? **Vending Machine Messages** – Have students create point of purchase nutrition information to post on the outside of school vending machines. Gather information from labels on snacks sold in the machine. (From The New Label, There's Something In It For Everybody)